Exciter Test Coil Instructions

Wire: 26-30#
Turns: 50-100

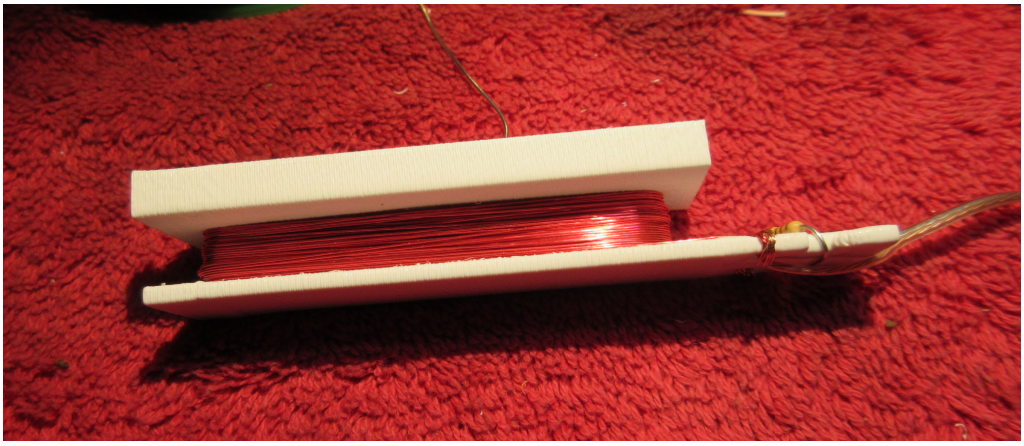
The exciter test coil is designed to sit on standard 52mm single-coil Strat style pickup, but will also work fine placed on humbucker and other pickups.

3d Printing

The exciter bobbin is designed so that it can be printed in a single piece on most common 3d filament printers from a plastic such as PLA or PET-G. In order to do this the bobbin is printed standing on one end. Since there is very little surface area there, you may need to include a brim or just make sure that you have some fresh hair spray or whatever you like to use to promote adhesion to the print bed.

It is common for some sagging to occur during the bridging at the bottom of the bobbin. A little clean up of this with an exact-o knife or small file should work fine rather than printing support material.

Winding:

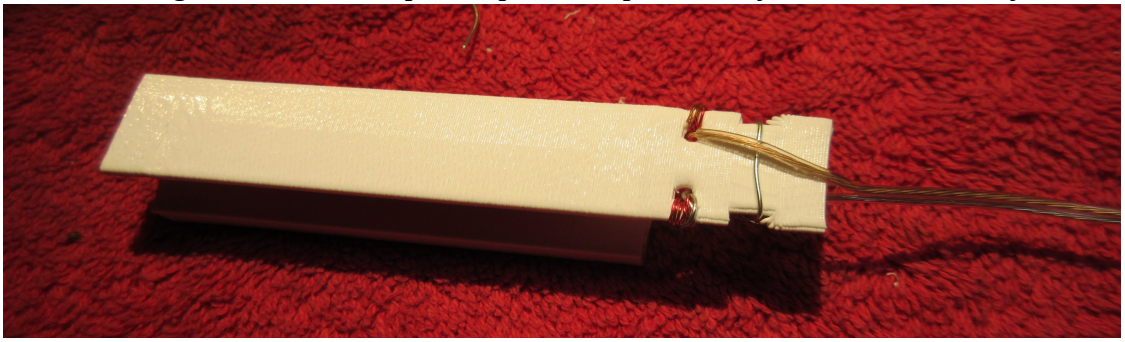


Pass the wire through one of the sets of holes at the top end of the bobbin and fix it as you might with a normal pickup bobbin. While eyelets could be installed here, they aren't really necessary.
Try to get at least the first two layers of wire wound as neatly and tightly as possible to help generate a nice strong signal from the coil. I used 75 windings of #28 wire, and got perfectly acceptable results.

Wiring

Final assembly:
Insert a lead from the 100Ohm resistor on one side, and wrap the other lead around the stem.

Attach one of your test leads to the coil end not connected to the resistor, and the other to the end of the resistor lead. Doing this from opposite sides as shown helps keep the wire ends away from each other. To secure the arrangement, a small zip tie is placed to prevent any strain on the wire junctions.



Finally, connect a headphone plug or other suitable connector for your exciter signal source connection. For stereo audio connections you can connect both the left and right side outputs to one side of the coil while grounding the other side.